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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,056

06/22/2006

Kazuaki Ishihara

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9383

27123 7590 11/26/2008
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EXAMINER

MCDONOUGH, JAMES E

ART UNIT

PAPER NUMBER

1793

NOTIFICATION DATE

DELIVERY MODE

11/26/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/574,056	Applicant(s) ISHIHARA ET AL.	
	Examiner JAMES E. MCDONOUGH	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-16, 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19 and 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-19 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bublewitz et al. (US 2002/0156186) (herein after Bublewitz I).

Regarding claims 17, 18, and 22

Bublewitz I teaches a condensation (esterification) catalyst comprising metal alkoxides such as zirconium alkoxides, hafnium alkoxides, gallium alkoxides and iron alkoxides and further teaches the use of double metal alkoxides (paragraph 0098), which contain two different metal alkoxides in a particular ratio and would read on using both zirconium and iron alkoxides together.

Regarding claim 19

This claim only further limits the independent claim when the zirconium compound is a halide not when it is an alkoxide.

Regarding claim 23

This claim only further limits the claim when the metal chosen is iron.

Regarding claims 24-28

are intended use limitations, which do not add to the patentability of a composition claim.

Claims 17-19 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bublewitz et al. (US 2002/0147275) (herein after Bublewitz II).

Regarding claims 17, 18, and 22

Bublewitz I teaches a condensation (esterification) catalyst comprising metal alkoxides such as zirconium alkoxides, hafnium alkoxides, gallium alkoxides and iron alkoxides and further teaches the use of double metal alkoxides (paragraph 00921), which contain two different metal alkoxides in a particular ratio and would read on using both zirconium and iron alkoxides together.

Regarding claim 19

This claim only further limits the independent claim when the zirconium compound is a halide not when it is an alkoxide.

Regarding claim 23

This claim only further limits the claim when the metal chosen is iron.

Regarding claims 24-28

These are intended use limitations, which do not add to the patentability of a composition claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1793

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 17-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bublewitz et al. (US 2002/0156186) (herein after Bublewitz I).

Regarding claims 17, 18, and 22

Bublewitz I teaches a condensation (esterification) catalyst comprising metal alkoxides such as zirconium alkoxides, hafnium alkoxides, gallium alkoxides and iron alkoxides and further teaches the use of double metal alkoxides (paragraph 0098), which contain two different metal alkoxides in a particular ratio and would read on using both zirconium and iron alkoxides together. Furthermore, a Markush group itself reads on a mixture of the recited elements and further still it is prima facie obvious to combine two or three compositions, each taught for the same purpose to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423.

Regarding claim 19

This claim only further limits the independent claim when the zirconium compound is a halide not when it is an alkoxide.

Art Unit: 1793

Regarding claim 23

This claim only further limits the claim when the metal chosen is iron.

Regarding claims 24-28

These are intended use limitations, which do not add to the patentability of a composition claim.

Claims 17-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bublewitz et al. (US 2002/0147275) (herein after Bublewitz II).

Regarding claims 17, 18, and 22

Bublewitz I teaches a condensation (esterification) catalyst comprising metal alkoxides such as zirconium alkoxides, hafnium alkoxides, gallium alkoxides and iron alkoxides and further teaches the use of double metal alkoxides (paragraph 0092), which contain two different metal alkoxides in a particular ratio and would read on using both zirconium and iron alkoxides together. Furthermore, a Markush group itself reads on a mixture of the recited elements and further still it is prima facie obvious to combine two or three compositions, each taught for the same purpose to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423.

Regarding claim 19

This claim only further limits the independent claim when the zirconium compound is a halide not when it is an alkoxide.

Regarding claim 23

Art Unit: 1793

This claim only further limits the claim when the metal chosen is iron.

Regarding claims 24-28

These are intended use limitations, which do not add to the patentability of a composition claim.

Claims 17-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oki et al. (US 2002/0045545).

Regarding claims 17, 18, and 22

Oki teaches a catalyst comprising metal alkoxides such as zirconium alkoxides and iron alkoxides (paragraph 0045). Furthermore, a Markush group itself reads on a mixture of the recited elements and further still it is prima facie obvious to combine two or three compositions, each taught for the same purpose to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423.

Regarding claim 19

This claim only further limits the independent claim when the zirconium compound is a halide not when it is an alkoxide.

Regarding claim 23

This claim only further limits the claim when the metal chosen is iron.

Regarding claims 24-28

These are intended use limitations, which do not add to the patentability of a composition claim.

Response to Arguments

Applicants argue in their submission submitted 4/30/2008.

Applicant's amendments to claims 23-28, overcome the objection, therefore, it has been withdrawn.

Applicants the reference of Bublewitz does not provide enough disclosure to arrive at the presenting claimed catalyst and that since two catalyst would be used and there are 28 possible combinations this leads to 2^{28} (268,435,456) and therefore requires undue experimentation. This is not persuasive because: 1.) There are not 2^{28} possibilities. 2.) Applicants have not shown undue experimentation.

Applicants argue that the reference of Bublewitz does not teach the use of iron. However, it is noted that only claims 22 and 23 specifically require iron.

Applicants argue that claim 17 requires the use of iron. This is not persuasive because claim 17 requires the use of either iron and/or gallium.

Applicants the reference of Oki does not provide enough disclosure to arrive at the presenting claimed catalyst and that since two catalyst would be used and there are 13 possible combinations this leads to 2^{13} (8192) and therefore requires undue experimentation. This is not persuasive because: 1.) There are not 2^{13} possibilities (i.e. wrong probability) 2.) Applicants have not shown undue experimentation.

Applicants argue that since the independent claims are allowable, then the dependent claims also would be. This is not persuasive for the reason given above.

Applicants argue in their submission submitted 8/7/2008.

Applicants argue that since only the claims needed to be corrected the claims are allowable. This is not persuasive because the notice of non-compliant addressed the amendment and not the arguments, which have been addressed above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES E. MCDONOUGH whose telephone number is (571)272-6398. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.A. LORENZO/
Supervisory Patent Examiner, Art Unit 1793

JEM 11/13/2008